

MEMORANDUM

State of Alaska
Department of Transportation & Public Facilities
Northern Region Maintenance & Operations

TO: Howard Thies
Director, Maintenance and Operations
Northern Region

DATE: June 2nd, 2010
FILE NO: X:\Projects\Highways\Northway
Road\Design

THROUGH: Clark Milne, P.E.
Maintenance Engineer
Northern Region

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FROM: Joseph Kemp, P.E.
Asst. Maintenance Engineer
Northern Region

SUBJECT: Northway Road Repairs
Pending / 63629
Design Study Report

Introduction/History

This project is fully funded, with a mixture of Denali Commission, State General Fund, and Federal Preventive Maintenance funding.

The Northway Road surface was paved with a high-float asphalt surface treatment in 1999. Since then, however, it has degraded and become unsafe. Additionally, heavy equipment used for work at the Northway Airport has resulted in further deterioration of the high-float surface, which is in critical condition throughout most of the project area. The underlying gravel has settled unevenly, creating further surface problems. The road has a low AADT, approximately 160, but it is the only access route for the village of Northway, and is currently in poor condition.

Project Description

This project will consist of resurfacing approximately 9.3 miles of the Northway Road. The existing surface will be rotomilled into Crushed Asphalt Base Course, the embankment repaired and leveled, and a new high-float surface will be constructed. No changes or improvements to the roadway prism are anticipated, nor are any culverts or other drainage work proposed. The road surface will be returned to its 1999 as-built condition.

Design Standards

This project is being designed in accordance with the Alaska DOT&PF Highway Preconstruction Manual and the AASHTO Geometric Design of Highways and Streets.

Typical Section – No changes to the as-built typical section will be made. See attached typical section.

Drainage – The crown of the road will be re-established at 3%. No other drainage work will be performed.

Erosion and Sediment Control – This project will have no environmental disturbance, as work will be confined to the existing road prism.

Traffic Analysis – A specific traffic analysis will not be done for this project. One lane of access will be maintained at all times throughout the project. The Northway Road has an AADT of 160.

Safety Improvements – There will be no safety improvements on this project. Returning the road to its as-built condition alone will make it safer.

Access Control Features – N/A

Pedestrian/Bicycle and ADA Requirements – N/A

Right of Way Requirements – No ROW acquisition or modification will be required for this project.

Utility Relocation and Coordination – No utility relocation or special considerations will be required for this project.

Maintenance Considerations – This project will return the Northway Road to its as-built condition. No new maintenance costs or liabilities will be required, and future maintenance needs will be reduced from recent expenditures.

Environmental Commitments – This project will be covered under a Programmatic Categorical Exclusion.

Cost Estimate –

The estimated costs for this project are as follows:

Design	\$50,000.00
Utilities, Materials, ROW, etc	\$0.00
Construction (Includes 15 % CENG & 4.79% ICAP)	\$3,045,839.63
Total Cost of Project	\$3,092,839.63

Approved:

Howard Thies
Maintenance and Operations Director

Date

HC

Two Attachments: Preliminary Construction Estimate and Draft Typical Section

cc w/attachments: Ethan Birkholz, Planning Manager
Bruce Campbell, Environmental Coordinator
Jim Fehrenbacher, M&O Regional Maintenance Manager (3 copies)
Roger Healy, P.E., Chief Engineer, Headquarters
Clark Milne, P.E., M&O Maintenance Engineer
Bruce Senkow, Project Control
Steve Titus, P.E., Regional Director